

LAMINATED TYPE SEMICONDUCTOR CERAMIC ELEMENT AND PRODUCTION METHOD FOR THE LAMINATED TYPE SEMICONDUCTOR CERAMIC ELEMENT

ABSTRACT OF THE DISCLOSURE

A laminated type semiconductor ceramic element is provided with good PTC characteristics, low room temperature resistance value and improved withstand voltage of 15V or higher. Semiconductor ceramic layers made from a semiconductor ceramic containing barium titanate as the main component and the element nickel at about 0.2 mol% or less (excluding 0 mol%), and internal electrode layers are superimposed alternately, and an external electrode is formed so as to be connected electrically with the internal electrode layers. The production method comprises the steps of obtaining a laminated product of semiconductor material layers containing a barium titanate as the main component and about 0.2 mol% or less (excluding 0 mol%) of the element nickel, and internal electrode layers, obtaining a laminated sintered compact by reduction baking of the laminated product, forming an external electrode electrically connected with the internal electrodes of the laminated sintered compact, and re-oxidization processing of